

Corps of Engineer Comments on the PD Columbia/Snake River Temperature TMDL

Cover Letter:

1. EPA should follow the recommendations of the 1998 FACA Report that includes large existing dams in the baseline load allocation while focusing efforts on operational or feasible structural solutions.

Response: The approach used in developing the TMDL is consistent with the FACA recommendations when all seven recommendations related to dams are taken in context. The gist of the FACA report is that ultimately the existence of dams (not the operation, maintenance or potential modifications) should be given a background allocation. But first some steps have to be taken to accomplish that. The TMDL should be developed on the assumption that a feasible TMDL can be developed for impairments involving dams. The TMDL should include allocations for dams. Changes to operation, maintenance and potential modifications should be included in the implementation plans to meet the allocations. What can be done in terms of operations, maintenance or modifications to improve temperature? As a last resort, if no strategy can be found to address impairment due to the dam, states may amend the water quality standards. At this point the states will know what background allocation to assign to dams. They will have determined what the feasible improvements in temperature are that will result from changes in operation, maintenance and potential modifications.

In this way the process focuses in on the temperature improvements that are technically and economically feasible. Before going through this process, there is no way to know how much of the impairment due to dams to allocate to their existence as opposed to their operation, maintenance or modification.

2. The Corps is concerned that the current construct of the TMDL will have the unintended consequence of supporting the plaintiff's contention that dam removal, partial or whole, is an option the Corps should consider or be ordered to consider by a court for compliance with water quality standards.

Response: The construct of the TMDL refers to modeling the rivers without the dams in place and using the results to establish the temperature targets for the TMDL and the load allocations for the dams. Modeling the river with the dams out in no way implies that the TMDL is saying the dams have to be removed, and we will consider any proposed language from the Corps to make that point in the TMDL. Modeling the river with the dams removed was chosen as a method for determining what the temperature would be in the absence of human activity as required by the water quality standards. In fact it was the only method that would estimate temperature in the absence of human activity.

3. The Corps believes the preliminary draft TMDL is inconsistent with the governments position in the NWF v. Corps case and recommends the temperature TMDL be structure in a manner consistent with Corps authority to implement and consistent with the government's position in the litigation. The governments' position in NWF v. Corps is that the court review of compliance with water quality standards is limited to decisions the Corps has the authority to make, that is, operational decisions not decisions associated with the existence of the dams.

Response: The TMDL is not inconsistent with the governments position. The TMDL is only one part

of the water quality improvement process. It establishes the load allocations. It does not decide what, if any, feasible alternatives are available to meet those allocations. The implementation planning process identifies whether any feasible alternatives exist to improve water quality and what water quality can be achieved by the feasible alternatives. If the load allocations in the TMDL cannot be achieved, the TMDL and the water quality standards can be amended to reflect the water quality that can be achieved. We have proposed adding a great deal of language to the TMDL (see the Executive Summary) to better explain the overall water quality improvement process, the need to evaluate the feasibility (including economics) of control measures and the efforts that FCRPS agencies have already made to improve temperature.

4. EPA failed to include all uses and values in the site potential approach.

Response: The states develop water quality standards that will protect all designated uses of the river. Generally, achieving water quality that will protect the most sensitive use, in this case salmon, will protect the other uses. In this way, water quality standards consider all the uses as required by the CWA. The real issue here is the Corps concern that the only measure that will achieve the water quality standards that are intended to protect salmon uses is the removal of dams. The TMDL does not call for dam removal. The implementation plan will determine if there are feasible measures to meet the water quality standards. If not, the water quality standards and the TMDL can be amended to reflect the level of water quality that can be achieved with feasible measures.

5. Other than those actions already taken by the Corps, there are no practical operational and structural opportunities within the geographical scope of the TMDL to reduce river water temperatures.

Response: The evaluations leading to this conclusion need to be documented. EPA, the FCRPS action agencies, the states and tribes and the ESA services are working together on a long term water quality plan that, in part, will determine what feasible alternatives exist. Recently we have made good headway in the development of this plan.

6. The TMDL should not apply the site potential targets to project facilities such as adult fish ladders where biological studies have not identified a biological problem.

Response: The state water quality standards do not exempt any waters of the river from achieving the temperature standards. With regard to fish ladders, it is our understanding that studies are underway to document temperatures in the fish ladders and any effects of those temperatures. The results of those studies have not yet been released but should be valuable information for use in developing the water quality plan.

Specific comments:

1. A. Inconsistent water quality standards.

Response: The water quality standards are not so inconsistent. In the example cited, Idaho's actual criteria consist of 2 parts: a daily maximum of 22 °C and a daily average of 19 °C. Downstream of the Idaho Standards, OR and WA have temperature criteria of 20 °C. But beyond that, all the states and the Colville tribe base their standards on conditions in the absence of human activities that effect temperature. So all along the river, the criteria are not really the temperatures that have to be met.

The temperatures that have to be met are based on natural temperature or temperature in the absence of human activity.

B. TMDL uses the most conservative Oregon standard of 12.8 degrees.

Response: 12.8 °C is not the temperature standard. During salmonid spawning, if the natural temperature is over 12.8 °C, the standard is the natural temperature plus 0.14 °C.

WA and OR standards allow increases over natural due to human activity that are cumulative. The need for applying the additions cumulatively is readily apparent. Application of the increase at every facility on the river would result in total increases above the desired goal. That is why we have to utilize the downstream standards.